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- perature and for a time sufficient to remove water from said solution;
- (d) altering the surface of said substrate by heating the same at a temperature between about 318° C. to about 1000° C. to melt said alkali metal hydroxide coating on said substrate's surface; 5
- (e) cooling the substrate and rinsing the substrate in a dilute acid solution to neutralize said alkali metal hydroxide;
- (f) rinsing the substrate in water; 10
- (g) sensitizing and activating the substrate, and thereafter
- (h) immersing said altered substrate in an electroless metal plating bath for a time sufficient to deposit a strongly adhering metal layer thereon. 15
2. A method according to claim 1 wherein said alkali metal hydroxide solution of step (c) consists of about 50 grams of sodium hydroxide dissolved in 100 ml. of water.
3. A method according to claim 2 wherein said coating of an alkali metal hydroxide is deposited on said substrate by heating at a temperature of about 170° C. for a duration of 5 minutes. 20
4. A method according to claim 3 wherein said surface of said substrate is altered by heating the same to a temperature of about 450° C. to about 500° C. 25
5. A method according to claim 4 wherein said altered substrate is rinsed in a 20% acid solution selected from the group consisting of HCl, H₂SO₄ and HNO₃, for about 2 minutes.
6. A method according to claim 1 wherein the molten alkali metal hydroxide is maintained at a temperature of about 450° C. to about 500° C.
7. A method of electrolessly depositing a metal onto a surface of a ceramic substrate comprising the steps of: 30
- (a) cleaning the substrate in a hot alkaline cleaning solution;
- (b) rinsing the clean substrate in water;

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- (c) immersing said clean substrate in a molten alkali metal hydroxide;
- (d) removing the substrate from said molten alkali metal hydroxide;
- (e) cooling the substrate;
- (f) rinsing the substrate in a dilute acid solution to neutralize said alkali metal hydroxide;
- (g) rinsing the substrate in water to remove acid from said substrate;
- (h) sensitizing and activating the substrate, and thereafter,
- (i) immersing said altered substrate in an electroless metal plating bath for a time sufficient to deposit a strongly adhering metal film thereon.
8. A method according to claim 7 wherein said alkaline cleaning solution is maintained at a temperature of about 60° C.
9. A method according to claim 7 wherein the molten alkali metal hydroxide is maintained at a temperature in the range of about 318° C. to about 1000° C. and for a duration of about 10 to about 15 minutes.

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